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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,058	03/23/2004	Alain Yang	D0932-00411	4035

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EXAMINER

GOFMAN, ANNA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,058	Applicant(s) YANG ET AL.	
	Examiner Anna Gofman	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 43-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 and 48-50 is/are rejected.
- 7) ☒ Claim(s) 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/04;09/04;10/04;02/05</u> | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Claims 43-47 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 1, 2005.

Claim Objections

2. Claim 50 is objected to because of the following informalities: Applicants disclose "the insulation product of claim 48, wherein said resinous binder is a powdered or liquid, thermosetting, or thermoplastic biner." The word "biner" is a misspelling of "binder". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-42, and 48-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims rotary glass fibers, thermoplastic fibers, and textile fibers. It is unclear how the textile fibers are different from glass or thermoplastic fibers since both types of fibers can be formed into textiles.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 1771

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4, 9-12, 15-17, 21-28, 30, 35-42, 48, and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Yang et al. (US 2003/ 0049488).

Yang et al. teach a thermal and acoustic insulation containing textile fibers, rotary glass fibers and other organic fibers, such as rayon or polyester (pg.1 paragraphs 0002 and 0015), comprising a binder (pg.2 paragraph 0021) and a nonwoven scrim layer (pg.2 paragraph 0024). These organic fibers are inherently thermoplastic fibers. The textile fibers have diameters of about 5 to 16 micrometers and length of from about 2 cm to 15cm (or 20 mm to 150 mm), and are present from about 1 to 99% of the product. The rotary fibers have diameters of about 2 to 5 micrometers and lengths of 1 to 5 cm (or 10 to 50 mm) (pg.2 paragraph 0019). The insulation product has a thickness in a range from 10 to 80 mm. The binder is thermoplastic and holds together said fibers with a resin. The thermoplastic polymer will soften or flow upon heating above a temperature such as the melting point of the polymer, causing to bond the fibers. Upon cooling and hardening, the binder will hold the fibers together. The thermoplastic binder is present from about 4 to 24% of the insulation product (pg.2 paragraph 0021). Thus, claims 1-2, 4, 9-12, 15-17, 21-28, 30, 35-42, 48, and 50 are rejected.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1771

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5-8, 18, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al.

The features of Yang et al. have been set forth above. Yang et al. is silent about dimensions of said organic (or thermoplastic) fibers. It would have been obvious to one having ordinary skill in the art at the time of the invention to select the desired values of said thermoplastic fibers, with diameters of about 20 to 50 micrometers and lengths of about 13 to 102 mm, which would comprise about 30 to 50% of said insulation product, through the process of routine experimentation in order to arrive at values which offered the optimum insulation in the invention of Yang et al.

Further, Yang et al. is also silent about gram weight of the thermal and acoustic insulation product. It would have been obvious to one having ordinary skill in the art at the time of the invention to select the desired weight of about 700 to 3300 grams per square meters, through the process of routine experimentation in order to arrive at values which offered the optimum insulation in the invention of Yang et al. Thus, claims 5-8, 18, and 31-34 are rejected.

9. Claims 3, 29, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. in view of Kajander et al. (US 2003/0008586).

The features of Yang et al. have been set forth above. Yang et al. does not disclose using nylon as a thermoplastic fiber. Kajander et al. is drawn to thermoplastic and glass fiber laminates. Kajander et al. teach that organic synthetic polymer fibers

Art Unit: 1771

may contain nylon (paragraph 0020). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use nylon, as taught by Kajander et al. as a thermoplastic fiber in the insulation product of Yang et al., motivated to provide a more cost effective means of using insulation materials. Thus, claims 3, 29, and 49 are rejected.

10. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. in view of Tutin et al. (US 2004/ 0038017).

Yang et al. fail to teach the density of the insulation laminate. Tutin et al. is drawn to insulation laminates comprising glass and thermoplastic fibers. Tutin et al. teach that such insulation can have a density of 1-40 pounds per cubic foot. (paragraph 0060). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the insulation of Yang et al. so that it comprised the density taught by Tutin et al., motivated by the teaching of Tutin et al. that these values produce a suitable insulation product. Thus, claims 19-20 are rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Gofman whose telephone number is (571) 272-7419. The examiner can normally be reached on Mon.-Fri. 8:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anna Gofman
Examiner
Art Unit 1771

AG


ELIZABETH M. COLE
PRIMARY EXAMINER